

## Biochemistry

MOLECULAR MODELING OF TRIOSE PHOSPHATE ISOMERASE AND INHIBITORS: A POTENTIAL CURE FOR MALARIA Jenny Jo Mueller, Mark Paulsen\*, Northern Michigan University, Chemistry Department, Marquette, MI 49855 [jemuelle@nmu.edu](mailto:jemueller@nmu.edu)

Triose phosphate isomerase (TIM) is a molecule essential to the net energy gain of glycolysis. When in the host bloodstream, the malarial parasite uses glycolysis almost exclusively for energy. Sequence variations in the active site of the enzyme may allow inhibition of malarial TIM without affecting human TIM. Molecular modeling is used to compare binding affinities of ligands to malarial TIM and human TIM, with the potential of finding a treatment for malaria.